Haresh Kumar Sharma
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Objective

To get a challenging position in a professional organization where, I can enhance my skills and strength in conjugation with the company goal. I am willing to work as a key player in challenging and creative environment.

Education

Year	Course	Institute	Grade/Divi
2014	Ph.D (Mathematics)	NIT Durgapur (**Thesis submitted** on Topic: Rough Sets)	**--**
2014	M.Tech (Operation Research)	NIT-Durgapur	**8.04 CGPA**
2008	M.Sc. (Mathematics)	Dr. B.R. Agra University	**I**
2005	B.Sc. (Mathematics)	Dr. B.R. Agra University	**II**
2002	Intermediate (UP Board)	Saraswati Inter college, Hathras (UP)	**III**
1999	High School (UP Board)	Seksaria Inter college, Hathras (UP)	**II**

Experience (4 years)

- Worked as an **Assistant Professor** of **Engineering Mathematics** at P.K. Institute of Technology and Management Mathura-Aligarh Road, Birhana (Raya), Mathura-281206 from 1 July 2009 to 30 July 2012 **(3 years)**.
- Worked as an **Assistant Professor** of **Engineering Mathematics** at MKITM Shivpuri Link Road, Gwalior, Madhya Pradesh from 17 Sep. 2008 to June. 2009 **(8 month)**.

Professional Skills

SUBJECTS STUDIED

- Soft Computing
- Operation Research
- Statistics
- Fuzzy Mathematics
- Fuzzy logic

AREAS OF INTEREST

- Engineering Mathematics
- Operation Research
- Business Mathematics

Technical/Software Skills

- Elementary knowledge of Autodesk inventor
- Basic knowledge of MS Office
- Can work on different Operating system

Publications

- **Sharma, H. K., & Kar, S. (2018).** Decision Making for Hotel Selection using Rough Set Theory: A case study of Indian Hotels. International Journal of Applied Engineering Research, 13(6), 3988-3998. (SCOPUS).
- **Sharma, H. K., Kumari, K & Kar, S. (2018).** Air passengers forecasting for Australian airline based on hybrid rough set approach, Journal of Applied Mathematics, Statistics and Informatics. 14(1), 5-18. (Clarivate Analytics, ESCI).
- **Sharma, H., Roy, J., Kar, S. (2018).** Multi Criteria Evaluation Framework for Prioritizing Indian Railway Stations Using Modified Rough AHP-Mabac Method. Transport and Telecommunication Journal, 19(2), pp. 113-127. Retrieved 1 May. 2018, (Clarivate Analytics, SCOPUS).
- **Sharma, H. K., Kumari, K & Kar, S.** Short-term forecasting of air passengers based on hybrid rough set and double exponential smoothing model. Intelligent automation and soft computing. (Accepted). (Clarivate Analytics SCI)
- **Roy, J., Sharma, H., Kar, S., Zavadskas, K., Saparauskas, J.** An extended COPRAS model for multi-criteria decision making problem and its application in web-based hotel evaluation and selection, Economic Research (Taylor & Francis). (Accepted). (SSCI)

Conference/Workshops/Symposium/ Certificate Courses

- **Sharma, H. K., & Kar, S. (2018). Criteria Selection Decision Making of Hotels through Rough Set Theory,** Compendium of papers, **"**2nd International Conference on Frontiers of Science &Technology (ICFST-18)" KIET Group of Institutions, Ghaziabad-201206, UP, INDIA, **July 21-22,2018.**
- **Sharma, H. K. Forecasting Seasonal foreign tourist arrival based on rough set theory-An evidence from India**, Compendium of papers, 7th National Conference on "New Age Economic Reforms in India" BVM college of Management Education, Gwalior, Madhya Pradesh, India, **January 13-14, 2018.**
- **Sharma, H. K.** attended an International Conference on "Facets of Uncertainties and Applications (ICFUA2013)." Operational Research Society of India Kolkata Chapter & Department of Applied Mathematics Calcutta University, Ramakrishna Mission Institute of Culture, Gol Park Kolkata, West Bengal 700029, India, **Dec. 5–7, 2013.**
- **Sharma, H. K.** International seminar on "Computational Optimization: methods and Algorithms" Organized by Heritage Institute of Technology, Kolkata. India.
- **Sharma, H. K.** Lecture series on" Limiting Availability in Reliability Theory" Organized by department of Mathematics, National Institute of Technology, Durgapur. India
- **Sharma, H. K.** "Global Initiative for Academic networks" **course From Data to Knowledge: State of the Art Tools to Analyze Static and dynamic Data**", Organized by department of Mathematics, National Institute of Technology, Durgapur. India
- **Sharma, H. K.** Attended a GIAN course on **Flexible Statistical Modeling**. Global Initiative for Academic Networks (GIAN), Mangalore University, **Oct. 10-14, 2016.**

Academic Research and Projects

1. **Ph. D. research topic: "Attribute selection and decision-making using rough set theory." [September, 2014- Awaiting PhD viva]**

Description: Decision-making under uncertainty is one of the most difficult tasks in real life problem. Uncertainty appears due to insufficient and incomplete information in the decision parameters of a problem. Rough set theory, and its hybridizations have been successfully applied to solve the real life decision making problems, which are often uncertain. In this thesis, we have considered different decision making problems based on Indian railways reservation system, selection of Indian hotels, air passenger data, Indian railways stations and web based hotel data. These problems are conducted on different decision making techniques and forecasting model like COPRAS, MABAC and double exponential smoothing model using different rough set approach. Specifically, the first problem on railway reservation system is studied using the classical based rough set theory and dominance based rough set theory. The second problem deals with hotel selection problem, where the associated criteria are selected using classical based rough set theory. In our third problem, the tourist arrival problem is solved using a hybridized approach of double exponential smoothing (a forecasting method) and classical based rough set theory. In the fourth problem, we have employed the proposed rough-Analytic hierarchy process-Multi-attribute border approximation area comparison technique to determine the qualitative analysis of Indian railway stations. Finally, in the fifth problem, the hotel tourism problem is eventually solved with a proposed multi-criteria decision-making technique, rough-COmplex Proportional Assessment method. The performance of the techniques used in our case studies are also compared and analyzed.

2. **M.Tech. Project Research: "Attribute Reduction by Using Rough Set Approach." [May, 2013- May, 2014]**

Description: The original rough set approach proved to be very useful in dealing with inconsistency problems following from information granulation. The rough set concept is a new mathematical approach to imprecision, vagueness and uncertainty. To some extend it overlaps with fuzzy set theory and evidence theory-nevertheless the rough set theory can be viewed in its own rights, as an independent discipline. The proposed work focused mainly on vague and uncertain data related to Indian railways and mobile sets. To apply RST, the data should be rough and vague, the Indian railway and mobile sets data satisfy these constraints (As they are vague, uncertain and imprecise). Therefore, RST applied to solve such problems that satisfied the above properties. Hence, present study reviled that the Indian railway data decision attribute already exist where as in case of mobile sets data decision making had been derived. Roughness had also calculated for Indian railway data and then appropriate values for the decision attribute were derived by the known values of condition attribute Rough set theory is a new approach to decision making in the presence of uncertainty, vagueness and impreciseness. The basic concepts of rough set theory have been outline, and their possible applications were briefly discussed.

General Interests

Painting, Listening Music and Solving Puzzles

Personal Information

Full Name	Haresh Kumar Sharma
Date of Birth	February 12 , 1983
Gender	Male
Languages Known	English, Hindi
Permanent Address	S/O Mr. Dev Dutt Sharma Vishnupuri Hathras-204101

Reference

1. Dr. Samarjit Kar Head of the Department, Professor, Department of Mathematics National Institute of Technology, Durgapur Durgapur – 713209, INDIA E mail: kar_s_k@yahoo.com Tel : 91-09434788032	**2 Dr. Goutam Panigrahi** Assistant Professor, Department of Mathematics National Institute of Technology, Durgapur Durgapur – 713209, INDIA, Email: goutam.panigrahi@maths.nitdgp.ac.in Tel : 91-09434789015